

REMARKS

The Examiner objects to the drawings for the reason that specified claimed features are not shown. Applicant respectfully disagrees and requests that the Examiner reconsider and remove this objection.

Specifically, the Examiner alleges that the first and second end surfaces claimed in claim 1 are not shown. Applicant refers the Examiner to Fig. 7 which shows contact surfaces 224b. *See* Application, page 8, last full paragraph. Applicant also refers the Examiner to Fig. 1, where the front left surface in the profile view corresponds to a first end surface. Similarly, Applicant refers the Examiner to Fig. 3. The Application states that Fig. 3 shows, “both end surfaces of the stator core 122” being brought together. *See* Application paragraph bridging page 6 and page 7. This is depicted in Fig. 3 by the arrows which terminate at first and second end surfaces in profile.

The Examiner also alleges that projections extending in a circumferential direction and formed on the teeth as recited in claim 15 are not shown. Applicant asserts that the claimed projections are shown and indicated, for example, by reference characters 124a and 124b. Applicant also refers the Examiner to Fig. 4. Applicant respectfully asserts that the claimed centers of air gaps are denoted in the Figure by the dashed lines. Fig. 4 shows that an interval in the radial direction between these centers of air gaps alternates between 24 and 36 degrees. Applicant respectfully asserts that all of the above described detail from Fig. 4 is shown in

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greater detail in the partial enlarged view of Fig. 5, and described in greater detail in the Application at the top of page 7 in connection with Fig. 5.

For at least the foregoing reasons, Applicant respectfully submits that all of the claimed features are shown in the Figures.

Claims 1-5 and 9-18 are all the claims pending in the application.

Claims 1-5 and 9-18 are rejected for double patenting as being unpatentable over claims 1-12 of Kometani et al. (U.S. Patent No. 6,288,471 B1) (hereinafter "Kometani"). Applicant respectfully traverses this rejection.

The Examiner concedes that the claims of Kometani are not identical to the pending claims. Nevertheless, the Examiner asserts that the pending claims are not patentably distinct from claims 1-12 of Kometani. Applicant respectfully disagrees with the Examiner's assertion.

Pending claim 1, from which claims 2-5 depend, recites, "a first end surface and a second end surface fixed together to form said annular shape". Similarly, claim 9, from which claims 10-14 depend, recites, "end surfaces fixed together to complete said annular shape". Claims 1-12 of Kometani do not include this limitation. Applicant respectfully asserts that pending claims 1-5 and 10-14 are patentably distinct from claims 1-12 of Kometani for at least this reason.

Similarly, pending claim 15, from which claims 16-18 depend, recites, "an interval . . . is alternated by alternating said lengths. . . ." Claims 1-12 of Kometani do not describe anything

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being alternated in any way. Applicant respectfully asserts that pending claims 15-18 are patentably distinct from claims 1-12 of Kometani for at least this reason.

For at least the foregoing reasons, Applicant respectfully requests that the rejection of claims 1-5 and 9-18 under the doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of Kometani be withdrawn.

Claims 1-5 and 9-18 are rejected under 35 U.S.C. § 112 as being indefinite for the reasons specified by the Examiner. Applicant respectfully traverses this rejection.

The Examiner does not specify a basis for this rejection with respect to independent claim 15 or claims 16-18 depending therefrom. Therefore, Applicant assumes that the Examiner only intended to apply this rejection to claims 1-5 and 9-14. If the Examiner intended to apply this rejection to claims 15-18, Applicant requests that the Examiner state specifically the basis for that rejection so that Applicant may respond specifically thereto.

Regarding claim 1, the Examiner refers to “end pieces” and finds the claims confusing as to whether the claimed stator core is a single piece or more than one piece. Applicant points out that claim 1 does not recite the “end pieces” referred to by the Examiner. Rather, the claim recites end surfaces, more specifically, “a first end surface and a second end surface”. Further, the claim expressly recites that the stator core is a “single piece”. It is not indefinite for a “single piece” apparatus to have “end surfaces” plural. The claim does not recite two pieces put together to form the core as alleged by the Examiner, but rather two end surfaces fixed together to form

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the stator annulus. Applicant respectfully asserts that claim 1 satisfies the definiteness requirement of section 112.

Regarding claim 2, the claim is amended to remove the language that concerned the Examiner. Applicant respectfully asserts that claim 2 satisfies the definiteness requirement of 35 U.S.C. § 112.

Regarding claim 9, the claim is amended to change the word “partition” to the word --define--. Applicant is uncertain what the Examiner meant by “the width of the own stator teeth divides itself?” Nevertheless, Applicant submits that, as amended, claim 9 satisfies the definiteness requirement of 35 U.S.C. § 112.

Regarding claim 10, the Examiner questions whether the claim implies that the stator core is not connected sometimes. In response, Applicant refers to the discussion above in connection with the Examiner’s double patenting rejection. Claim 9, from which claim 10 depends, recites “an annular shaped stator core”. Applicant respectfully asserts that claim 10 satisfies the definiteness requirement of 35 U.S.C. § 112.

Regarding claim 11, the Examiner questions what alternates, the size of the interval (singular) or the size of the air gaps (plural). Applicant respectfully asserts that the verb tense of the word “alternates” is the verb tense applied to a singular subject. Given that the subject “an interval” is singular and the subject “air gaps” is plural, Applicant asserts that the claim definitely recites that the claimed interval alternates as claimed.

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For at least the foregoing reasons, Applicant respectfully requests that the rejection of claims 1-5 and 9-18 under 35 U.S.C. § 112 as being indefinite be withdrawn.

Claims 1-5 and 9-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kometani in view of Huang et al. (U.S. Patent No. 5,592,731) (hereinafter "Huang"). Applicant respectfully traverses this rejection.

Applicant files herewith a translation of the priority document, P. Hei. 11-370254, thus perfecting Applicant's claim to priority. That being the case, Applicant asserts that Kometani is not prior art under any subsection of 35 U.S.C. § 102. Therefore, Kometani is not a valid reference against the present application as applied by the Examiner.

For at least the foregoing reasons, Applicant respectfully requests that the rejection of claims 1-5 and 9-18 under 35 U.S.C. § 103(a) as being unpatentable over Kometani in view of Huang be withdrawn.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,



Kelly G. Hyndman Reg No 39,234

for Mark R. Woodall
Registration No. 43,286

SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, D.C. 20037-3213
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

Date: April 30, 2002

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

1. (Three Times Amended) A stator for an automotive alternator, said stator comprising:

[a] an annular shaped, single piece stator core formed as a lamination of a plurality of sheet-shaped magnetic members, having a plurality of teeth defining [in which] a plurality of slots extending in axial directions [are formed] at one side of a yoke at an inner circumference thereof, [and] two sets of three-phase stator coils [which are] fitted into said slots, and a first end surface and a second end surface fixed together to form said annular shape, wherein

2 slots are provided for each phase of said stator coils and each magnetic pole and the total number of the slots is 72 or more[, and

said stator core is formed as a lamination of a plurality of sheet-shaped magnetic members with a plurality of teeth defining said slots at one side of a yoke, said stator core being a single piece having a first end surface and a second end surface, said stator coils being disposed in said slots, and said stator core then being formed into an annular shape such that said stator coils become disposed at an inner side at said inner circumference thereof, and said end surfaces of said stator core are fixed together to complete said annular shape].

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2. (Amended) A stator for an automotive alternator according to Claim 1, wherein
[characterized in that, a mutual] an interval in the circumferential direction between a center of
air gaps of adjacently formed slot opening portions is [formed to be uneven] not the same.

9. (Amended) A stator for an automotive alternator, said stator comprising:

[a] an annular shaped stator core formed as a lamination of a plurality of sheet-shaped
magnetic members, [in which] having a plurality of teeth defining a plurality of slots extending
in axial directions [are formed] at one side of a yoke at an inner circumference thereof, [and] two
sets of three-phase stator coils [which are] fitted into said slots, and end surfaces fixed together
to complete said annular shape, wherein

2 slots are provided for each phase of said stator coils and each magnetic pole and the
total number of the slots is 72 or more, and

[said stator core is formed as a lamination of a plurality of sheet-shaped magnetic
members with a plurality of teeth defining said slots at one side of a yoke, said stator coils being
disposed in said slots, and said stator core then being formed into an annular shape such that said
stator coils become disposed at an inner side at said inner circumference thereof, and end
surfaces of said stator core are fixed together to complete said annular shape,]

wherein widths of said teeth which [partition] define said slots alternate in size in [the] a
circumferential direction.